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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	Not Yet Assigned - 10/735,116
				Filing Date	December 9, 2003
				First Named Inventor	Henryk Dudek
				Art Unit	NTA 1614
				Examiner Name	Not Yet Assigned - R. Henley
				Attorney Docket Number	CIBT-P03-068
Sheet	1	of	5		

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ²	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ³ (if known)			
	AA	US-4,007,268	02-08-1977	Voorhees	
	AB	US-4,353,888	10-12-1982	Sefton	
	AC	US-4,634,706	01-06-1987	Kaneko et al.	
	AD	US-4,751,224	06-14-1988	Agarwal et al.	
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	AG	US-5,041,138	08-20-1991	Vacanti et al.	
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	AL	US-5,565,462	10-15-1996	Eitan et al.	
	AM	US-5,712,171	01-27-1998	Zambias et al.	
	AN	US-5,736,412	04-07-1998	Zambias et al.	
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	AP	US-6,291,516	09-18-2001	Dudek et al.	

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Examiner Initials ¹	Cite No. ²	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³ -Number-Kind Code ⁴ (if known)			
	BA	EU-EP0020029A1	10-12-1980	X	
	BB	WO-89/11487	11-30-1989		
	BC	WO-91/07087	05-30-1991		
	BD	WO-91/10743	07-25-1997		
	BE	WO-92/10092	06-25-1992		
	BF	WO-93/01275	01-21-1993		
	BG	WO-93/09668	05-27-1992		
	BH	WO-93/20242	10-14-1993		
	BI	WO-93/21929	11-11-1993		
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	BK	WO-94/09229	04-28-1994		
	BL	WO-94/10292	05-11-1994		
	BM	WO-94/16718	08-04-1994		
	BN	WO-98/58650	12-30-1998		
	BO	WO-99/52534	10-21-1999		

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Examiner Signature	<i>R. Henley</i>	Date Considered	3/11/05
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JH	CA	Alcedo et al., "The drosophila smoothened gene encodes a seven-pass membrane protein, a putative receptor for the hedgehog signal," Cell 86:221-232 (1996)	
	CB	Altava, "Restrictions to floor plate induction by hedgehog and winged-helix genes in the neural tube of frog embryos," Mol. Cell. Neurosci. 6:106-121 (1995)	
	CC	Apelqvist et al., "Sonic hedgehog directs specialized mesoderm differentiation in the intestine and pancreas," Curr. Biol., 7:801-804 (1997)	
	CD	Bellusci et al., "Involvement of Sonic hedgehog in mouse embryonic lung growth and morphogenesis," Development 124:53 (1997)	
	CE	Berge et al., "Pharmaceutical Salts," J. Pharm. Sci. 66:1-19 (1977)	
	CF	Bitgood et al., "Sertoli cell signaling by Desert hedgehog regulates the male germline," Curr. Biol. 6:298 (1996)	
	CG	Bitgood et al., "Hedgehog and Bmp Genes are coexpressed at many diverse sites of cell-cell interaction in the mouse embryo," Dev. Biol. 172:126-138 (1995)	
	CH	Bumcrot et al., "Proteolytic processing yields two secreted forms of sonic hedgehog," Mol. Cell. Biol. 15:2294-2303 (1995)	
	CI	Chang et al., "Products, genetic linkage and limb patterning activity of a murine hedgehog gene," Development 120:3339-3353 (1994)	
	CJ	Chen et al., "Analogous organic synthesis of small-compound libraries: validation of combinatorial chemistry in small-molecule synthesis," JACS 116:2661 (1994)	
	CK	Chen et al., "Dual roles for patched in sequestering and transducing hedgehog," Cell 87:553-563 (1996)	
	CL	Davidson, "How embryos work: a comparative view of diverse modes of cell fate specification," Development 108:365-389 (1990)	
	CM	Dunnett et al., "Mechanisms of function of neural grafts in the adult mammalian brain," J. Exp. Biol., 132:265-289 (1987)	
	CN	Echelard et al., "Sonic hedgehog, a member of a family of putative signaling molecules, is implicated in the regulation of CNS polarity," Cell 75:1417-1430 (1993)	
	CO	Ekker et al., "Distinct expression and shared activities of members of the hedgehog gene family of xenopus laevis," Development 121:2337-2347 (1995)	
	CP	Ericson et al., "Sonic hedgehog induces the differentiation of ventral forebrain neurons: a common signal for ventral patterning within the neural tube," Cell 81:737-756 (1995)	
	CQ	Fan et al., "Patterning of mammalian somites by surface ectoderm and notochord: evidence for sclerotome induction by hedgehog homolog," Cell 79:1175-1189 (1994)	
	CR	Fan et al., "Long-range sclerotome induction by sonic hedgehog: direct role of the amino-terminal cleavage product and modulation by the cyclic AMP signaling pathway," Cell 81:457-465 (1995)	
	CS	Fietz et al., "Secretion of the amino-terminal fragment of the hedgehog protein is necessary and sufficient for hedgehog signalling in drosophila," Curr. Biol. 5:643-651 (1995)	
	CT	Forbes et al., "Hedgehog is required for the proliferation and specification of ovarian somatic cells prior to egg chamber formation in Drosophila," Development 122:1125-1135 (1996)	
	CU	Francis et al., "Bone morphogenetic proteins and a signalling pathway that controls patterning in the developing chick limb," Development 120:209-218 (1994)	
	CV	Freed et al., "Neocartilage formation in vitro and in vivo using cells cultured on synthetic biodegradable polymers," J. Biomed Mater Res. 27:11-23 (1993)	
JH	CW	Freund et al., "Efferent synaptic connections of grafted dopaminergic neurons reinnervating (cont.)	

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	CW (CW#1)	the host neostriatum: a tyrosine hydroxylase immunocytochemical study," J. Neuroscience 5:603-616 (1985)	
	CX	Fujita et al., "Involvement of sonic hedgehog in the cell growth of LK-2 cells, human lung squamous carcinoma cells," Biochem Biophys Res Commun 238:658-664 (1997)	
	CY	Gailani et al., "The role of the human homologue of Drosophila patched in sporadic basal cell carcinomas," Nature Genetics 14:78-81 (1996)	
	CZ	Goodrich et al., "Altered neural cell fates in medulloblastoma in mouse patched mutants," Science 277:1109-1113 (1997)	
	CA1	Goodrich et al., "Conservation of the hedgehog/patched signaling pathway from flies to mice: induction of a mouse patched gene by hedgehog," Genes Dev. 10:301-312 (1996)	
	CB1	Grande et al., "The repair of experimentally produced defects in rabbit articular cartilage by autologous chondrocyte transplantation," J. Orthopaedic Res. 7:208-218 (1989)	
	CC1	Gurdon, "The generation of diversity and pattern in animal development," Cell 68:185-199 (1992)	
	CD1	Hammerschmidt et al., "Protein kinase A is common negative regulator of hedgehog signalling in the vertebrate embryo," Genes Dev. 10:647-658 (1996)	
	CE1	Hidalgo et al., "Cell patterning in the Drosophila segment: spatial regulation of the segment polarity gene patched," Development 110:291-301 (1990)	
	CF1	Hooper et al., "The drosophila patched gene encodes a putative membrane protein required for segmental patterning," Cell 59:751-764 (1989)	
	CG1	Hui et al., "Expression of three mouse homologs of the Drosophila segment polarity gene cubitus interruptus, Gli, Gli-2, and Gli-3, in ectoderm- and mesoderm-derived tissues suggests multiple roles during postimplantation development," Dev Biol. 162:402-413 (1994)	
	CH1	Jensen et al., "Expression of sonic hedgehog and its putative role as a precursor cell mitogen in the developing mouse retina," Development 124:363 (1997)	
	CI1	Hynes et al., "Induction of midbrain dopaminergic neurons by sonic hedgehog," Neuron 15:35-44 (1995)	
	CJ1	Jessel, "Diffusible factors in vertebrate embryonic induction," Cell 68:257-270 (1992)	
	CK1	Johnson et al., "Exotopic expression of sonic hedgehog alters dorsal-ventral patterning of somites," Cell 79:1165-1173 (1994)	
	CL1	Johnson et al., "Human homolog of patched, a candidate gene for the basal cell nevus syndrome," Science 272:1668-1671 (1996)	
	CM1	Kinzler et al., "The GLI gene encodes a nuclear protein which binds specific sequences in the human genome," Mol. Cell. Biol. 10:634-642 (1990)	
	CN1	Krauss et al., "A functionally conserved homolog of the drosophila segment polarity gene hh is expressed in tissues with polarizing activity in zebrafish embryos," Cell 75:1431-1444 (1993)	
	CO1	Lai et al., "Patterning of the neural ectoderm of xenopus laevis by the amino-terminal product of hedgehog autoproteolytic cleavage," Development 121:2349-2360 (1995)	
	CP1	Laufer et al., "Sonic hedgehog and Fgf-4 act through a signaling cascade and feedback loop to integrate growth and patterning of the developing limb bud," Cell 79:993-1003 (1994)	
	CQ1	Lee et al., "Autoproteolysis in hedgehog protein biogenesis," Science 266:1528-1537 (1994)	
	CR1	Lee et al., "Secretion and localized transcription suggest a role in positional signaling for products of the segmentation gene hedgehog," Cell 71:33-50 (1992)	
	CS1	Lench et al., "Characterization of human patched germ line mutations in naevoid basal cell carcinoma syndrome," Human Genetic., 100(5-6):497-502 (1997)	
	CT1	Leven et al., "molecular pathway determining left-right asymmetry in chick embryogenesis," Cell 82:803-814 (1995)	
	CU1	Lopez-Martinez et al., "Limb-patterning activity and restricted posterior localization of the amino-terminal product of sonic hedgehog cleavage," Curr. Biol. 5:791-795 (1995)	
	CV1	Marigo et al., "Biochemical evidence that patched is the hedgehog receptor," Nature 384:177-179 (1996)	

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<input checked="" type="checkbox"/>	CW1	Marigo et al., "Conservation in hedgehog signaling: induction of a chicken patched homolog by sonic hedgehog in the developing limb," Development 122:1225-1233 (1996)	
<input type="checkbox"/>	CX1	Marigo et al., "Regulation of patched by sonic hedgehog in the developing neural tube," PNAS 93:9346-9351 (1996)	
<input type="checkbox"/>	CY1	Marti et al., "Requirement of 19K from the sonic hedgehog for induction of distinct ventral cell types in CNS explants," Nature 375:322-325 (1995)	
<input type="checkbox"/>	CZ1	Marti et al., "Distribution of sonic hedgehog peptides in the developing chick and mouse embryo," Development 121:2537-2547 (1995)	
<input type="checkbox"/>	CA2	Mitra-Kirtley et al., "Determination of the nitrogen chemical structures using XANES spectroscopy," JACS 115:252-258 (1993)	
<input type="checkbox"/>	CB2	Munsterberg et al., "Combinatorial signaling by sonic hedgehog and Wnt family members induces myogenic bHLH gene expression in the somite," Genes Dev. 9:2911-2922 (1995)	
<input type="checkbox"/>	CC2	Nakano et al., "A protein with several possible membrane-spanning domains encoded by drosophila segment polarity gene patched," Nature 341:508-513 (1989)	
<input type="checkbox"/>	CD2	Niswander et al., "A positive feedback loop coordinates growth and patterning in the vertebrate limb," Nature 371:609-612 (1994)	
<input type="checkbox"/>	CE2	Nusse, "Patching up hedgehog," Nature 384:119-120 (1996)	
<input type="checkbox"/>	CF2	Omnell et al., "Expression of veratrum alkaloid teratogenicity in the mouse," Teratology 42:105-119 (1990)	
<input type="checkbox"/>	CG2	Orenic et al., "Cloning and characterization of the segment polarity gene cubitus interruptus dominant of drosophila," Genes and Development 4:1053-1067 (1990)	
<input type="checkbox"/>	CH2	Oro et al., "Basal cell carcinomas in mice overexpressing sonic hedgehog," Science 276:817-821 (1997)	
<input type="checkbox"/>	CI2	Perrimon, "Hedgehog and beyond," Cell 80:517-520 (1995)	
<input type="checkbox"/>	CJ2	Perrimon, "Serpentine proteins slither into the wingless and hedgehog fields," Cell 86:513-516 (1996)	
<input type="checkbox"/>	CK2	Placzek et al., "Induction of floor plate differentiation by contract-dependent, homeogenetic signals," Development 117:205-218 (1993)	
<input type="checkbox"/>	CL2	Porter et al., "Hedgehog patterning activity: role of a lipophilic modification mediated by the carboxy-terminal autoproteolysis domain," Cell 86:21-34 (1996)	
<input type="checkbox"/>	CM2	Porter et al., "The product of hedgehog autoproteolytic cleavage active in local and long-range signalling," Nature 374:363-366 (1995)	
<input type="checkbox"/>	CN2	Riddle et al., "Sonic hedgehog mediates the polarizing activity of the ZPA," Cell 75:1401-1416 (1993)	
<input type="checkbox"/>	CO2	Roberts et al., "Sonic hedgehog is an endodermal signal inducing Bmp-4 and Hox genes during induction and regionalization of the chick hindgut," Development 121:3163-3174 (1995)	
<input type="checkbox"/>	CP2	Roelink et al., "Floor plate and motor neuron induction by different concentrations of the amino-terminal cleavage product of sonic hedgehog autoproteolysis," Cell 81:445-455 (1995)	
<input type="checkbox"/>	CQ2	Roelink et al., "Floor plate and motor neuron induction by vhh-1, a vertebrate homolog of hedgehog expressed by the notochord," Cell 76:761-775 (1994)	
<input type="checkbox"/>	CR2	Stone et al., "The tumour-suppressor gene patched encodes a candidate receptor for sonic hedgehog," Nature 384:129-134 (1996)	
<input type="checkbox"/>	CS2	Stone et al., "Future directions," Clin Orthop Relat Res 252:129 (1990)	
<input type="checkbox"/>	CT2	Tabata et al., "The drosophila hedgehog gene is expressed specifically in posterior compartment cells and is a target of engrailed regulation," Genes Dev. 6:2635-2645 (1992)	
<input type="checkbox"/>	CU2	Takigawa et al., "Chondrocytes dedifferentiated by serial monolayer culture form cartilage nodules in nude mice," Bone Miner 2:449 (1987)	
<input type="checkbox"/>	CV2	Tanabe et al., "Induction of motor neurons by sonic hedgehog is independent of floor plate differentiation," Curr Biol. 5:651-658 (1995)	
<input checked="" type="checkbox"/>	CW2	Vacanti et al., "Synthetic polymers seeded with chondrocytes provide a template for new cartilage formation," Plast Reconstr Surg 88:753 (1991)	

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<input checked="" type="checkbox"/>	CX2	von Schroeder et al., "The use of polyactic acid matrix and periosteal grafts for the reconstruction of rabbit knee articular defects," J Biomed Mater Res 25:329 (1991)	
<input type="checkbox"/>	CY2	Wakitani et al., "Repair of rabbit articular surfaces with allograft chondrocytes embedded in collagen cell," J. Bone Jt Surg 71B:74 (1989)	
<input type="checkbox"/>	CZ2	Wang et al., "Induction of dopaminergic neuron phenotype in the midbrain by sonic hedgehog protein," Nature Med. 1:1184-1188 (1995)	
<input type="checkbox"/>	CA3	Weinberg et al., "Developmental regulation of zebrafish MyoD in wild-type, no tail and spadetail embryos," Development 122:271-280 (1996)	
<input type="checkbox"/>	CB3	Xie et al., "Mutations of the patched gene in several types of sporadic extracutaneous tumors," Cancer Res 57:2369-2372 (1997)	
<input type="checkbox"/>	CC3	Xie et al., "Physically mapping the 5 Mb D9S196-D9S180 interval harboring the basal cell nevus syndrome gene and localization of six genes in this region," Genes Chromosomes Cancer 18:305-309 (1997)	
<input type="checkbox"/>	CD3	Yamada et al., "Control of cell pattern in the neural tube: motor neuron induction by diffusible factors from notochord and floor plate," Cell 73:673-686 (1993)	
<input type="checkbox"/>	CE3	Murone et al., Sonic hedgehog signaling by the patched-smoothed receptor complex," Current Biology 9:76-84 (1999)	
<input checked="" type="checkbox"/>	CF3	Epstein et al., Antagonizing cAMP-dependent protein kinase A in the dorsal CNS activates a conserved sonic hedgehog signaling pathway," Development 122:2885-2894 (1996)	

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